II. REMARKS

Claims 1 and 3-18 are pending. Claims 1, 4, 6, and 18 are amended. The amendments are supported by the specification and the originally filed claims. For example, the amendments to claim 1 is supported by the first paragraph on page 2 of the specification and the last paragraph on page 7 of the specification. The amendments to claims 4, 6, and 18 are supported, for example, by the last paragraph on page 7 of the specification, and the paragraph bridging pages 4-5 of the specification. Claims 4, 6, and 18 are also amended to clarify the claimed acrylic content, as suggested by the Examiner on page 2 of the Office Action. No new matter is added.

Applicants thank the Examiner for indicating that claim 5 would be allowable if rewritten in independent form, and that claims 4, 6, 7, 16, and 18 would be allowable if the indefiniteness rejection was overcome.

Claims 4, 6, 7, 16, and 18 are rejected under 35 U.S.C. § 112, second paragraph, for asserted indefiniteness. This rejection is traversed.

Applicants note that the amount of acrylic monomer (a) in polymer A must be selected in such a manner as to satisfy the condition that the blend must contain at least 0.01% of monomer (A). Indeed, the present claims disclose that the blend contains at least 0.01% of monomer (a) and not that the polymer A must contain 0.01% of monomer (a). However, in order to comply with the Examiner's request and expedite prosecution, the Applicant amended present claims 4, 6, and 18 to clarify that "the blend contains an amount of acrylic monomer (a) in the range higher than 0.01% to 15% by moles with respect to the total sum of the monomers of ethylene and of CTFE and/or TFE of the

blend" (emphasis added). Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4, 6, 7, 16, and 18 under 35 U.S.C. § 112, second paragraph.

Claims 1, 3, 8, 9, 11-15, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Abusleme et al. (EP 1,038,914) in view of Stoeppelmann (U.S. Patent No. 5,869,157). This rejection is traversed.

Please see the previously filed remarks distinguishing Abusleme et al. and Stoeppelmann.

Applicants note that the embodiment of Stoeppelmann noted by the Examiner at "column 4, lines 1-14" (Office Action, page 4) provides a layer of a polyamide having 50 μeq/g -NH_2 groups and admixed with diamine. In contrast, present claim 1 clearly does not provide for the presence of diamine in the layer of polyamide having 40-300 μeq/g – NH2 end groups in view of the phrase "consisting of." As such, Applicants respectfully submit that the embodiment of Stoeppelmann cited by the Examiner is not relevant to the presently claimed invention.

In addition, the adhesion of the layer to fluoropolymer of this embodiment of Stoeppelmann is obtained after prolonged storage or annealing at 100-130°C. In contrast, the present claim 1 provides that "adhesion is reached after coextrusion or coupling the layers at softening temperatures of the copolymers of layers A) and B)." Applicants note that the coextrusion temperatures and the softening temperatures of the polymers of the present layers A) and B) are higher than the annealing temperatures of

Stoeppelmann. As such, the teachings of Stoeppelmann are again not relevant to the presently claimed invention.

By combining Abusleme et al. and Stoeppelmann, those of skill in the art would have been taught to carry out a prolonged storage or annealing in order to achieve adhesion of a multilayer. In contrast, as noted above, the claimed multilayer not containing diamine achieves adhesion after coextrusion or coupling the layers at softening temperatures of the copolymers. Such an adhesion is unexpected in view of the teachings of Stoeppelmann, as discussed above.

Further, Applicants respectfully maintain that a combination of the disclosures of Abusleme et al. and Stoeppelmann would result in a three-part multilayer of:

(1) a fluoropolymer layer of E/CTFE with acrylic monomer (a) without a cross-linking agent;

(2) an intermediate layer of a polyamide having an excess of $-NH_2$ end groups (e.g., "a NH_2 end group number (end group concentration) of 50 μEq/g" (Stoeppelmann, column 4, lines 1-14)) and admixed with a diamine (see, e.g., Stoeppelmann, column 4, lines 19-23, teaching away from an excess of amino end groups without any diamine if adhesion is desired); and

(3) a hydrogenated layer of a polyamide admixed with a diamine.

Applicants respectfully submit that present independent claim 1 may be clearly distinguished from the above combination of the disclosures of Abusleme et al. and Stoeppelmann, as present claim 1 discloses layer (B) as "consisting of polyamides having an amount of $-NH_2$ end groups in the range of 40-300 μeq/g and optionally

containing additives selected from fillers, lubricants, pigments, fire retardants, plasticizers, and thermal and UV stabilizers" (emphasis added). No diamines are disclosed in layer (B) of present claim 1. Dependent claims 3-5, 8-15, and 17 are patentable for at least the same reasons as claim 1.

Present independent claims 6 and 18 may also be clearly distinguished from such a combination of the cited references, as neither Abusleme et al. nor Stoeppelmann teach or suggest a multilayer manufactured article having a layer A) with a blend of "thermoprocessable copolymers of ethylene with cholorotrifluoroethylene, and/or tetrafluoroethylene, and with acrylic monomers of formula: CH_2=CH-CO-O-R_2 (a) ... with the copolymers of ethylene with chlorotrifluoroethylene and/or tetrafluoroethylene without the acrylic monomers, provided that the blend contains an amount of acrylic monomer (a) in the range higher than 0.01% to 15% by moles with respect to the total sum of the monomers of ethylene and of CTFE and/or TFE of the blend" and a layer B) "based on polyamides having an amount of -NH_2 end groups lower than 40 μeq/g, blended with ... one or more diamines" (present claims 6 and 18) (emphasis added). Dependent claims 7 and 16 are patentable for at least the same reasons as claim 6.

Applicants respectfully maintain that the "adhesion higher than 10 N/mm between the layers of A) and B)" in independent claims 1 and 6 is unexpected. For example, Applicants have demonstrated in Example 10 comparative in the present specification that a layer A) formed by ECTFE alone, without any acrylic monomer (a) as in claim 6, does not adhere to a "polyamides having an amount of –NH_2 end groups lower than 40 μeq/g" (present claim 6), even if the polyamide is admixed with a diamine. Further,

neither of the cited references disclose an "adhesion higher than 10 N/mm" (emphasis added) between the layers of A) and B) as in the multilayers of present claims 1 and 6. In contrast, Example 6 of Abusleme et al. discloses a "peeling force between the two layers of polymer A [E/CTFE/n-BuA] and polymer D' [polyamide 12 with crosslinking agent TAIC] is about 1 N/mm" (Abusleme et al., Example 6, paragraph [0058]) (emphasis added), and Example 7 of Abusleme et al. discloses "polymer A' [E/CTFE/n-BuA with crosslinking agent TAIC] and polymer D [polyamide 12]" with a "peeling force ... analogous to the previous Example [6]" (Abusleme et al., Example 7, paragraph [0059]). As such, Abusleme et al. teaches away from the level of adhesion of claims 1 and 6, and the high level of adhesion of present claims 1 and 6 would have been unexpected to those of skill in the art in view of the cited references.

Applicants also note that present claim 1 does not provide the application of diamine on the surface of the fluorinated layer as taught by paragraph 20 of Abusleme et al. In contrast, present claim 1 discloses "adhesion ... between the layers of A) and B)", such that no intermediate layer or film of diamine is provided for by the wording of present claim 1.

As neither Abusleme et al. nor Stoeppelmann et al., alone or in combination, teach or suggest multilayer manufactured articles with the particular layers of the presently claimed invention, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 3, 8, 9, 11-15, and 17 under 35 U.S.C. § 103(a) over Abusleme et al. in view of Stoeppelmann.

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Abusleme et al. in view of Stoeppelmann as applied to claim 1, and further in view of Krause et al. (U.S. patent No. 5,958,532). This rejection is traversed.

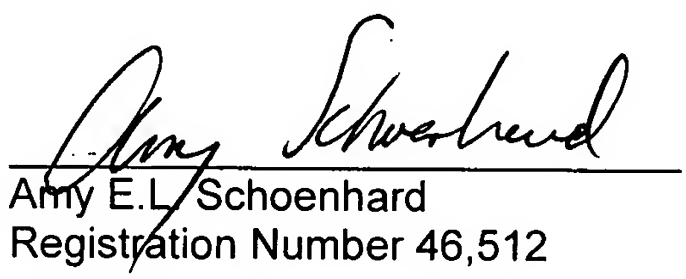
Applicants respectfully maintain that Krause et al. does not satisfy the deficiencies of Abusleme et al. and Stoeppelmann. Please see the above discussion distinguishing Abusleme et al. and Stoeppelmann from present claim 1. As such, Applicants respectfully submit that dependent claim 10 is patentable for at least the same reasons as independent claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 10 under 35 U.S.C. § 103(a) over Abusleme et al. in view of Stoeppelmann as applied to claim 1, and further in view of Krause et al.

III. Conclusion

In view of the amendments and remarks above, Applicants respectfully submit that this application is in condition for allowance and request favorable action thereon. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not considered to be timely filed, an appropriate extension of time is requested. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account Number 01-2300, referencing Docket Number **108910-00057**.

Respectfully submitted,



Amy E.L. Schoenhard
Registration Number 46,512

Customer Number 004372
ARENT FOX LLP
1050 Connecticut Avenue, NW, Suite 400
Washington, DC 20036-5339
Telephone: 202-857-6000
Fax: 202-857-6395